

$$1. 8, 11, 14, 17, 20, 23$$

$$2. \overset{1}{5}, \overset{2}{10}, \overset{3}{15}, \overset{4}{20}, \overset{5}{25}, \overset{6}{30}, \overset{7}{35}$$

$$0 \quad \downarrow \quad \begin{matrix} +5 \\ \downarrow \\ S_n \end{matrix}$$

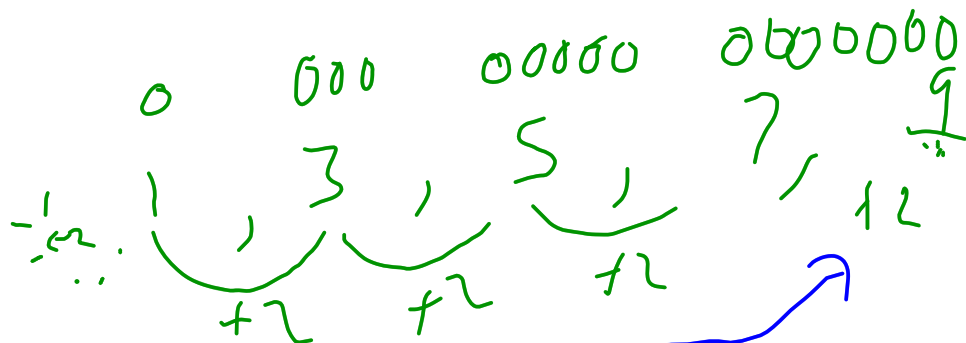
$$S(7) = 35$$

$$3. n+12 \quad \text{where } n=5$$

$$\begin{aligned} n+12 &= 5+12 \\ &= 17 \end{aligned}$$

4. $S_n + 1$ where $n = 12$

$$\begin{aligned} S_{n+1} &= S(12) + 1 \\ &= 60 + 1 \\ &= 61 \end{aligned}$$



$$\begin{aligned} S. 9 \text{ or } 2(n) - 1 &= 2(9) - 1 \\ &= 18 - 1 \\ &= 17 \end{aligned}$$

6. $2n - 1$ where $n = 50$

$$\begin{aligned} 2n - 1 &= 2(50) - 1 \\ &= 100 - 1 \\ &= 99 \end{aligned}$$

$$\begin{array}{l|l}
 7. & 2n-1=21 \\
 +1 & 2n-1+1=21+1 \\
 & 2n=22 \\
 \div 2 & 2n:2=22:2 \\
 & n=11
 \end{array}$$

8. 6, 11, 16, 21, 26

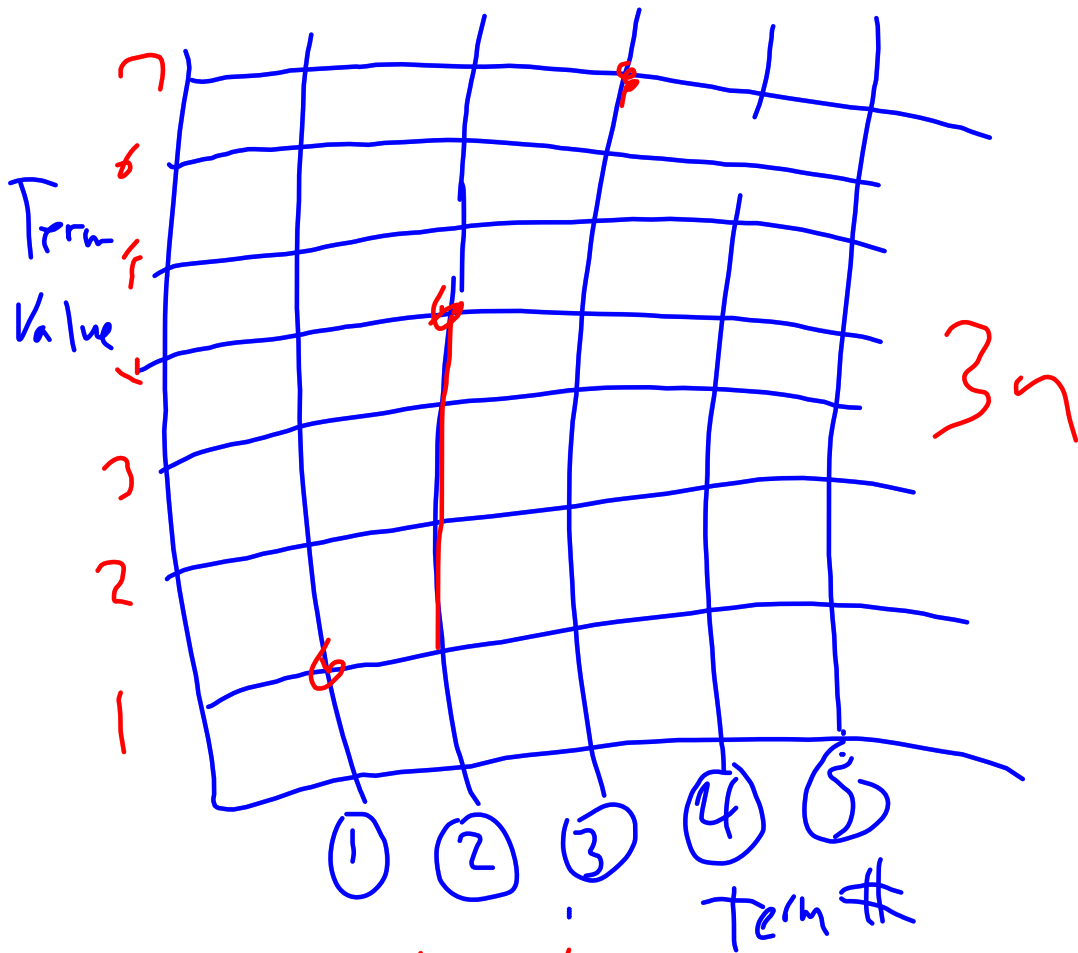
... $+5n+1$

102, 202, 302, 402, ...

$$100n + 2 \quad 100n + 2$$

10.

1	1	$\frac{13}{14}$	$\begin{array}{l} \xrightarrow{+1} n+13 \\ \xrightarrow{+1} n+13 \\ \xrightarrow{+1} n+13 \\ \xrightarrow{+1} n+13 \\ \xrightarrow{+1} n+13 \end{array}$
2	15		
3	16		
4	17		
5	18		



	(1)	(2)	(3)	4
-2	1	4	7	10

...

↑

$3n - 2$

1 2 3 4 5 6 7 8 9 10 11 12
 1 4 7 10 13 16 19 22 25 28 31 34

$$3n - 2 \text{ where } n = 12$$

$$3n - 2 = \frac{3(12) - 2}{= 36 - 2} = 34$$

$$\begin{array}{l|l} +2 & 3n - 2 = 40 \\ & 3n - \cancel{2} + \cancel{2} = 40 + 2 \\ & 3n = 42 \\ & 3n : 3 = 42 : 3 \\ & n = 14 \end{array}$$